

**UNITED STATES DEPARTMENT OF COMMERCE****Patent and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
08/839, 558	04/14/97	ARIMILLI	R AT9-97-148

LM51/0621

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EXAMINER

LANGJAHR, D

ART UNIT

PAPER NUMBER

2752

DATE MAILED: 06/21/99

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

<b>Notice of Allowability</b>	Application No.	Applicant(s)
	08/839558	Arimilli et al.
Examiner	Group Art Unit	
D. Langjahr	2752	

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance and Issue Fee Due or other appropriate communication will be mailed in due course.

This communication is responsive to Amendment filed 3-8-99

The allowed claim(s) is/are 1, 3, 4, 6-10, 14-15 renumbered 1, 3, 4, 2, 6, 7, 5, 8, 9-14

The drawings filed on \_\_\_\_\_ are acceptable.

Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

All  Some\*  None of the CERTIFIED copies of the priority documents have been

received.

received in Application No. (Series Code/Serial Number) \_\_\_\_\_.

received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

A SHORTENED STATUTORY PERIOD FOR RESPONSE to comply with the requirements noted below is set to EXPIRE THREE MONTHS FROM THE "DATE MAILED" of this Office action. Failure to timely comply will result in ABANDONMENT of this application. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL APPLICATION, PTO-152, which discloses that the oath or declaration is deficient. A SUBSTITUTE OATH OR DECLARATION IS REQUIRED.

Applicant MUST submit NEW FORMAL DRAWINGS

because the originally filed drawings were declared by applicant to be informal.

including changes required by the Notice of Draftsperson's Patent Drawing Review, PTO-948, attached hereto or to Paper No. 4.

including changes required by the proposed drawing correction filed on \_\_\_\_\_, which has been approved by the examiner.

including changes required by the attached Examiner's Amendment/Comment.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the reverse side of the drawings. The drawings should be filed as a separate paper with a transmittal letter addressed to the Official Draftsperson.

Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Any response to this letter should include, in the upper right hand corner, the APPLICATION NUMBER (SERIES CODE/SERIAL NUMBER). If applicant has received a Notice of Allowance and Issue Fee Due, the ISSUE BATCH NUMBER and DATE of the NOTICE OF ALLOWANCE should also be included.

**Attachment(s)**

Notice of References Cited, PTO-892

Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_

Notice of Draftsperson's Patent Drawing Review, PTO-948

Notice of Informal Patent Application, PTO-152

Interview Summary, PTO-413

Examiner's Amendment/Comment

Examiner's Comment Regarding Requirement for Deposit of Biological Material

Examiner's Statement of Reasons for Allowance

## REASONS FOR ALLOWANCE

1. The following is an Examiner's Statement of Reasons for Allowance:

The instant invention is directed at dual redundant associative cache directories allowing simultaneous reads. To that end, multiplexors, address tags and error correction are used.

2. Claims 1-19 were presented for initial examination. As of this amendment, claims 2, 5, 11 and 13 have been cancelled and claims 1, 6, 10, 15 and 16 have been rewritten.

3. The claim(s) listed below have been amended to more clearly distinguish this invention over the prior art in the area of information stored and its location. In view of these amendments, and on further examination and consideration, the art of record (Kalish et al., U.S. Patent 5553263 and Lee et al., U.S. Patent 5345576) do(es) not appear to specifically and explicitly teach or suggest the exact details and interplay crucial to defining concisely the instant invention: specifically, {amended claim(s) 1, 10} first and second redundant cache directories, writing both address tags and reading the memory blocks using both directories in a single clock cycle.

4. The other prior art found during the search and made of record, taken together, does not appear to teach or suggest the claimed invention:

Art Unit: 2752

USPN 5,283,876 [Tague] teaches a virtual memory unit with a plurality of directory and buffer store levels for storing page descriptor information. The memory directories and a least recently used (LRU) device constructed from the same type of standard cache address directory part include parity error detection circuits.

5. Any comments considered necessary by applicant must be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should be clearly labeled, "Comments on Statement of Reason for Allowance."

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Langjahr whose telephone number is (703) 305-4034 (e-mail address: David.Langjahr@uspto.gov). The examiner can normally be reached Monday through Thursday from 7:15 AM to 5:45 PM. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John W. Cabeca, can be reached on (703) 308-3116.

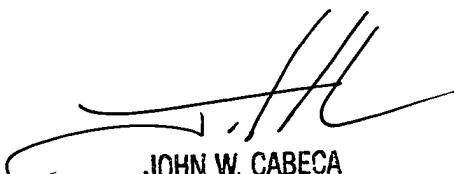
The fax phone number for this Group is (703) 308-5359. It is recommended that any faxes sent be followed by a voicemail message to (703) 305-4034 stating that a fax has been sent, and by whom. Also, please include a return phone number.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

*DCL*

DCL

May 19, 1999



JOHN W. CABECA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2700